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RECENT DEVELOPMENTS IN THE STUDY OF EDDY STIRRING AND MIXING IN THE SOUTHERN OCEAN

We review recent progress in the understanding and mapping of mesoscale eddy stirring in the southern ocean placing emphasis on the interplay of observations and theory. In particular we discuss: (i) the spatial distribution of "mixing zones" and "barriers" and their relation to the geography of the ocean's potential vorticity field and steering levels in the southern ocean. (ii) the vertical variation of the eddy stresses and its interplay with the applied surface wind stress in setting the meridional overturning circulation of the ocean (iii) implications of the above for the forthcoming DIMES southern ocean mixing experiment.

Oral presentation

Presentation is given by student: No

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Back

1 of 1 3/14/2008 5:55 PM